ABSTRACT

The method of the invention comprises the steps of proportioning a foam concentrate into a non-flammable liquid to form a foam concentrate/liquid mixture and creating a flowing stream of the foam concentrate/liquid mixture. Nitrogen is introduced to the stream of the foam/liquid mixture to initiate the formation of a nitrogen expanded foam fire suppressant. The flowing stream carrying the initially nitrogen expanded foam is dispensed, which completes the full expansion of the nitrogen expanded foam fire suppressant, into the confined area involved in fire thereby to smother the fire and to substantially close off contact between combustible material involved in fire and the ambient atmosphere substantially reducing the danger of explosion or flash fires. The apparatus of the invention is adapted for expanding and dispensing foam and comprises a housing defining an interior through which extend a discharge line. The ends of the housing are closed about the ends of the discharge line and the ends of the discharge line extend beyond the ends of the housing to define a connector at one end for receiving a stream of foam concentrate/liquid and at the opposite end to define the foam dispensing end of the apparatus. A portion of the discharge line in the housing defines an eductor for introduction of the expanding gas into the stream of foam concentrate/liquid flowing through the discharge line.